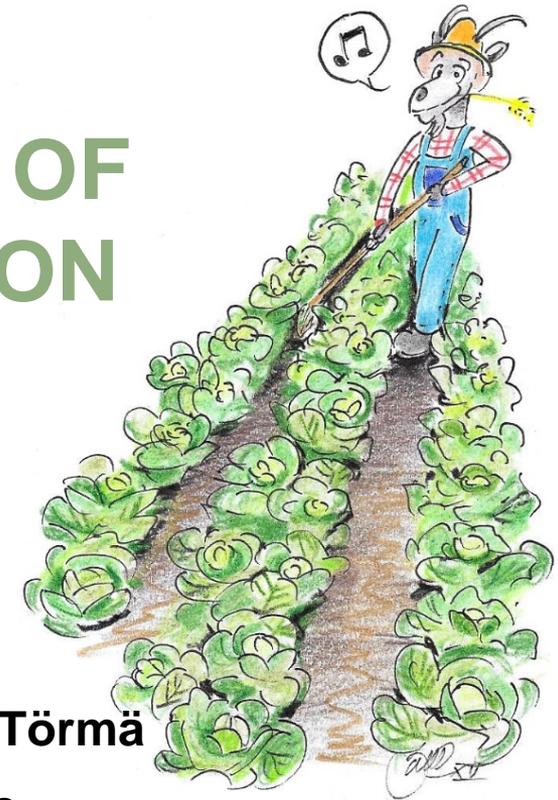


ECONOMIC EFFECTS OF ORGANIC PRODUCTION IN FINLAND

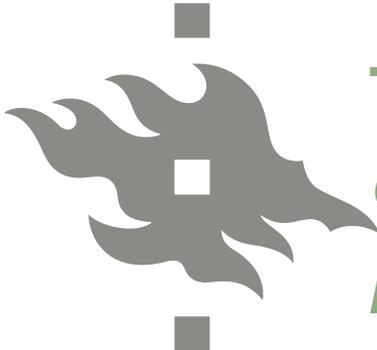


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University of Helsinki Ruralia Institute

4th NJF Organic Conference

Mikkeli, 20th June 2017



The project ”*Regional economic effects of organic production and promotion of production*”

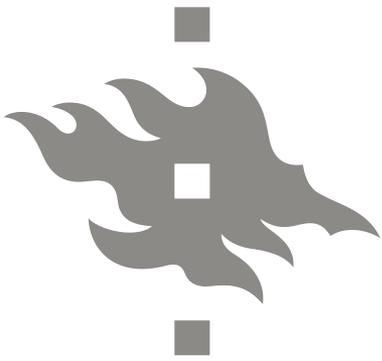
- Financed by
 - the Ministry of Agriculture and Forestry
 - the Finnish Organic Research Institute



PARTS OF THE STUDY:

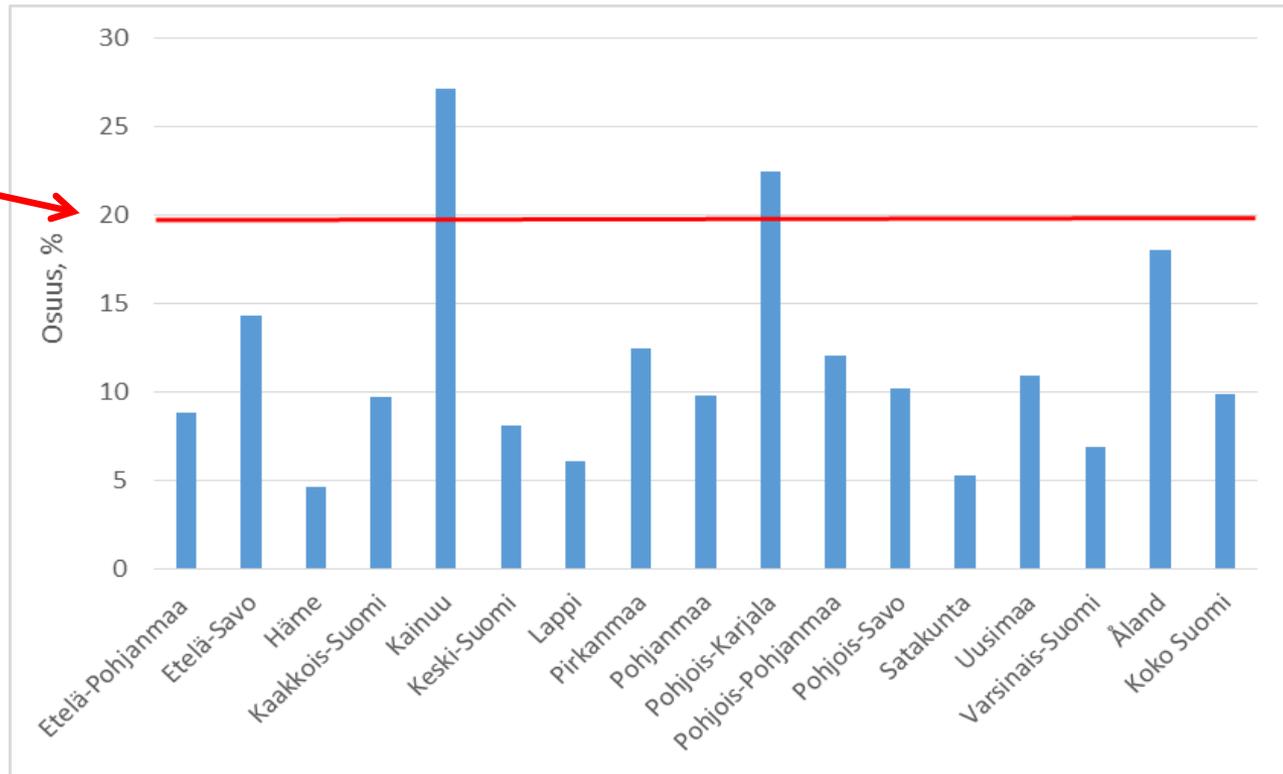
1. Survey among organic producers (n=840)
2. Survey among municipal authorities (n=276)
3. Regional economic effects of organic production estimated for the current situation as well for future

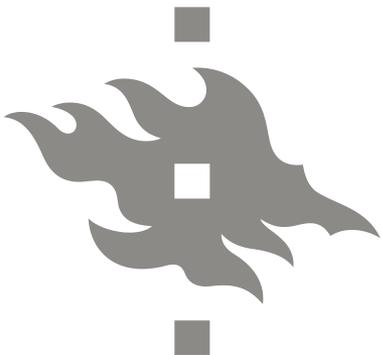
Model calculations carried out with the dynamic regional computable general equilibrium (CGE) model *RegFinDyn*



Government objective: the share of organic production to 20% of the cultivated area by the year 2020

Gov. objective



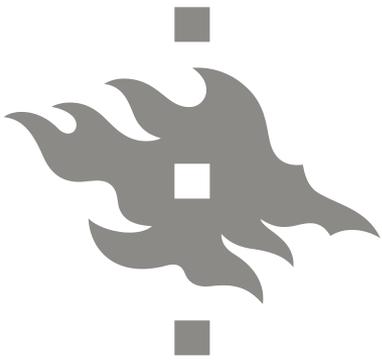


Producer survey: reasons for transitioning to organic production

The most important reasons:

- Profitability / lower costs
- Sustainability
- Healthiness and cleanliness

Reason for engaging in organic production	The most important	The second most important
<i>Lower production costs / increased profitability</i>	33.8	16.0
<i>Environmental sustainability</i>	18.3	17.3
<i>Healthiness and cleanliness</i>	9.2	11.9
<i>Better price</i>	7.6	8.9
<i>Higher subsidies</i>	6.3	10.8
<i>Other reason</i>	6.3	5.5
<i>The production was close to organic already</i>	5.0	5.8
<i>Took over the organic farm from parents</i>	2.3	1.7
<i>New challenges</i>	1.9	5.0
<i>Welfare of the animals</i>	1.7	1.8
<i>Demand pressure for organic food</i>	1.1	2.4
<i>Increased awareness of organic production</i>	1.0	2.3
<i>Growing market</i>	0.6	1.2



Producer quotes:



"It was almost a physical feeling that the earth and chemistry are not an item."

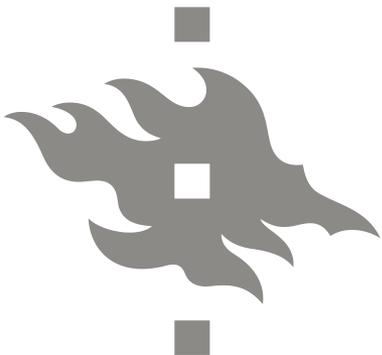
(55–64 years, organic producer, South Karelia)

"I just had to lower the production costs and as a new producer I had an urge to try how I would succeed with organics."

(45–54 years, organic producer, Southern Savonia)

"Long experience from conventional farming made me feel that it's too easy to fix everything with fake fertilizers and pesticides. Organic farming is much more demanding and therefore also a lot more rewarding."

(55–64 years, organic producer, Pirkanmaa)



Producers' own expectations on the development of their production value 2014–2020

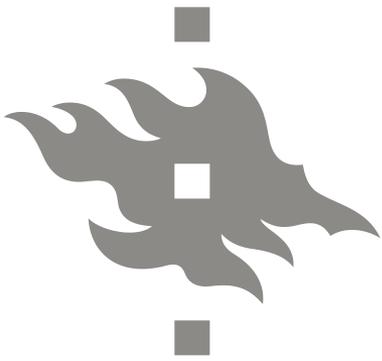
Most important factors behind producers' expectations:

- Demand for organic products
- Amount of bureaucracy and control
- Price of organic products
- Profitability
- Subsidies
- Age of the producer

Regions	Estimates for the growth of the production value of the own farm between 2014 and 2020 (%)
South Ostrobothnia	-9
Etelä-Savo	4
Häme	10
South-East Finland	3
Kainuu	6
Central Finland	3
Lappi	10
Pirkanmaa	6
Ostrobothnia	5
North Carelia	-8
North Ostrobothnia	7
Pohjois-Savo	-1
Satakunta	11
Uusimaa	10
Varsinais-Suomi	4
Åland	2
Finland in total	3

”Bureaucracy is such a mental burden that I was about to quit and phase down production this spring.” (35–44-year-old organic producer, Southern Ostrobothnia)



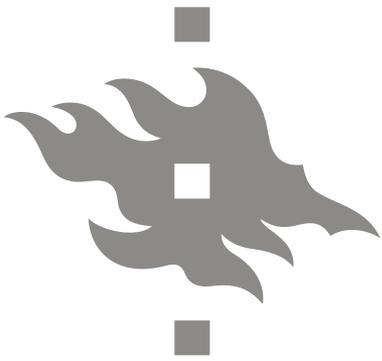


How to get more organic producers?

Producers proposed among others the following measures:

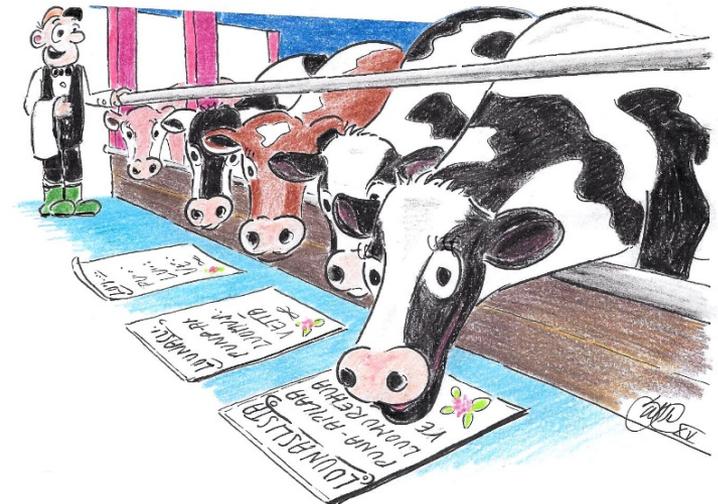
- Less bureaucracy and control
- Improved profitability
- Higher prices for fertilizers
- Increased demand for organic products
- Higher prices for organic products
- Promotion of organics / education
- Change in attitudes, and
- Higher appreciation of organic production

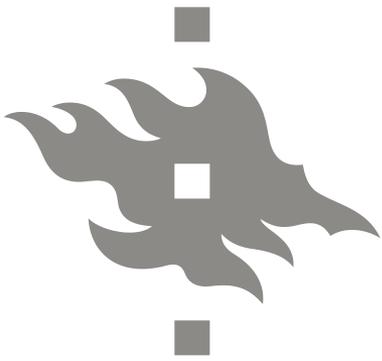




Organic food in municipalities

- Nowadays app. 5% of the food stuffs the public kitchens use are organic (in daycares app. 6%)
- According to a survey made in 2013, 40% of public kitchens would like to increase the use of organic food
- The most common organic products: flakes, flour, bread, vegetables, root crops, milk, and sour milk
- Government's decision in principle:
the share of organics 20% in public food procurement by 2020

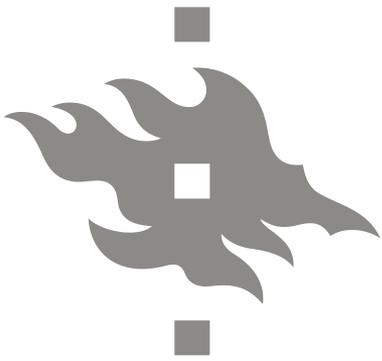




Municipal authority survey

- Carried out in April-May/2016
- The goal was to get answer from at least 100 different municipalities
- Survey was sent by e-mail to all the Finnish municipalities
- The respondents were municipal managers, chief procurement officers, catering chiefs, plus chairmen of city councils and local governments

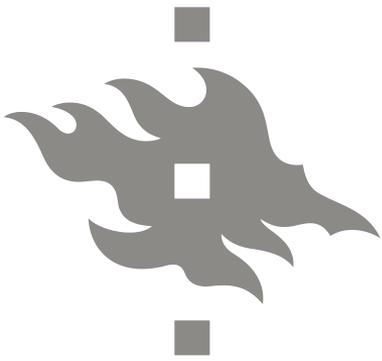




Food procurement in respondents' municipalities

- Elected officials often have rather vague understanding and awareness of food procurement.
- The most important factors in food procurement were: the safety of food stuffs and well-functioning logistics
- Domestic origin was regarded as the most important criteria for procurement.

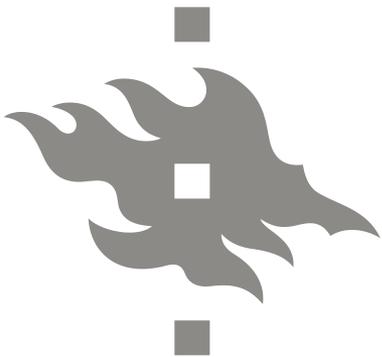




The use of organics in respondents' municipalities (1)

- The respondents' image on organic food was rather positive (supervised production; tastes good; animal welfare)
- In municipalities using organic food, its' share varied between 0,5 - 23%
- App. 12% of respondents said that "organic" is used as a criteria for procurement in their municipality.
- Most common organic food products: eggs, berries, flakes, vegetables, pasta and potatoes. Foreign products: banana.





The use of organics in respondents' municipalities (2)

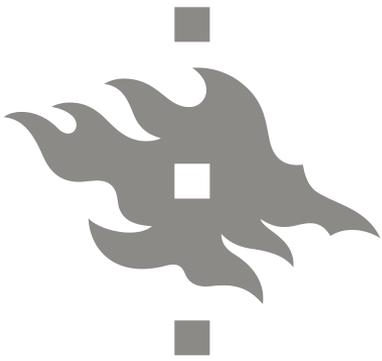
- The main reasons to buy organic products were their wholesomeness and cleanness.
- Trendiness was not regarded having any effect on public procurement.
- The most initiative group in advancing the use of organic food varied a lot between municipalities, but the activity of elected officials was often mentioned:

"Many of the elected officials are organic farmers."

"During the past few years some elected officials and local entrepreneurs have been very active about that."

"The elected officials have taken the initiative in the use of local and organic food."





The future of organic food in the public sector?

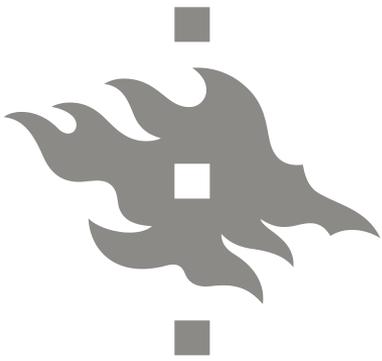


”The share of organic food is growing as the customers’ quality consciousness increases.”

”The political decisions by the municipal decision-makers affect positively.”

”Increase in the degree of value-added of organic food stuffs so that they are more suitable for public kitchens to use.”

”Organic food doesn’t offer any added value compared to other domestic foods. The demand for organic may even decrease.”

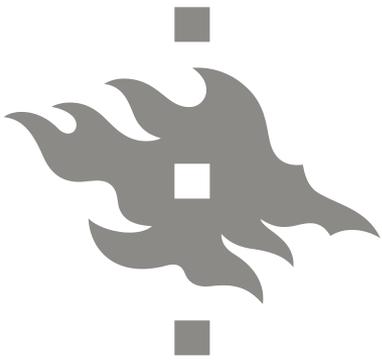


Organic & Public sector: Challenges

- Product prices / Annual appropriation
- Availability / Security of supply
- Centralized public procurement
- Degree of value-added
- Quality maintenance
- Logistics
- Awareness of those responsible for procurement
- Attitude

"The augmentation in the use of organic products in the public sector is made by small steps, then also the production is able to meet the need."



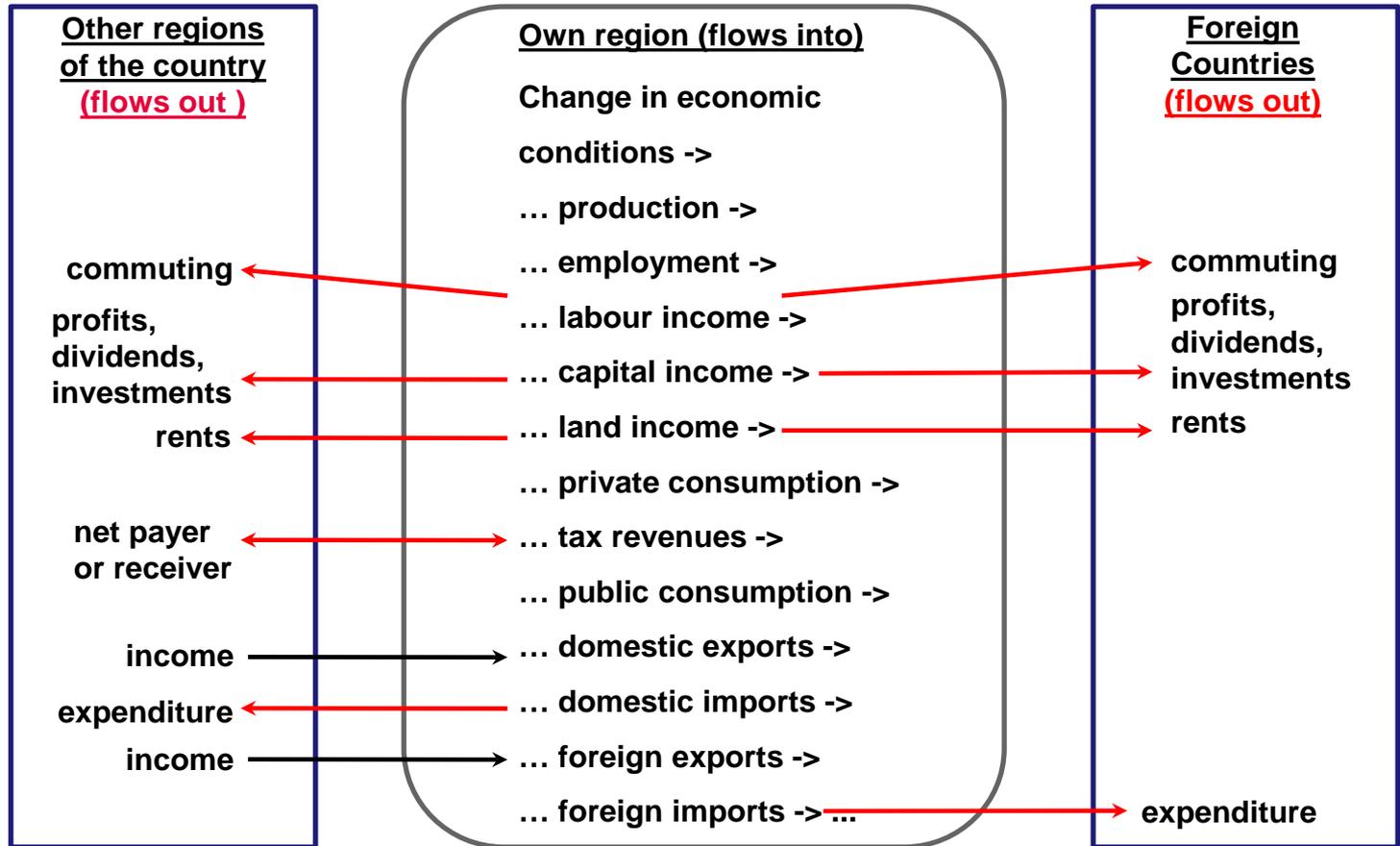


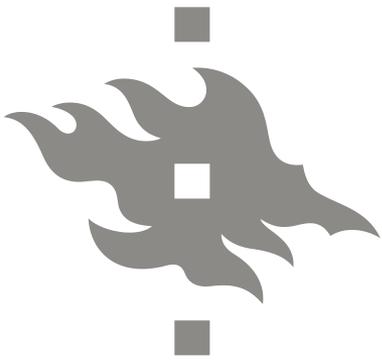
Overview of CGE models: Money flows into and out from the region

Results are calculated in net terms, like

$$RGDP = C + I + G + (Dexp - Dimp) + (Fexp - Fimp) + \text{changes in stocks}$$

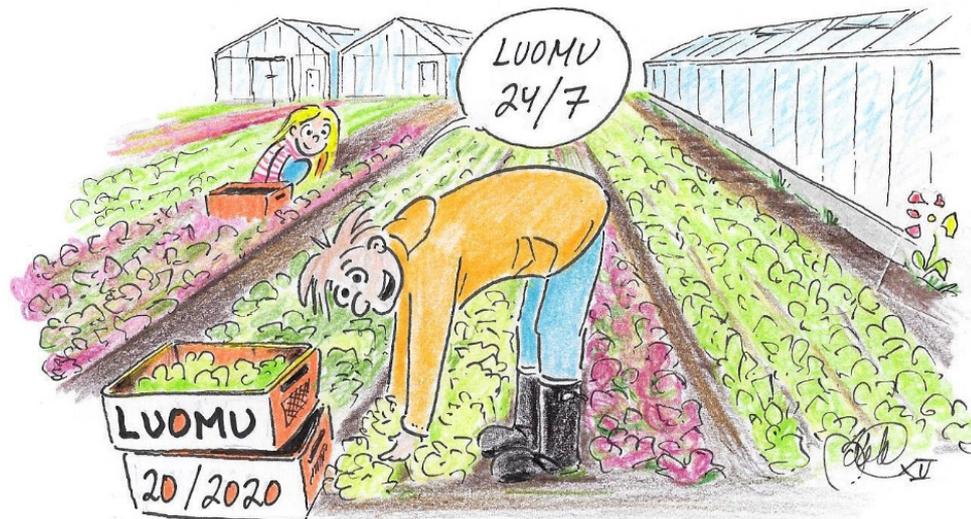
The effect of RGDP can be negative if domestic and/or foreign trade balances are in high deficit

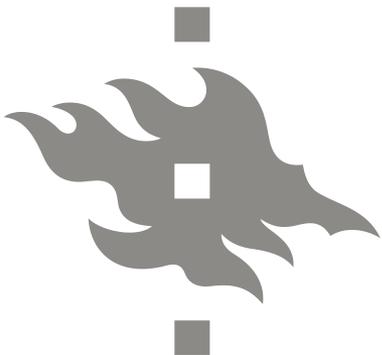




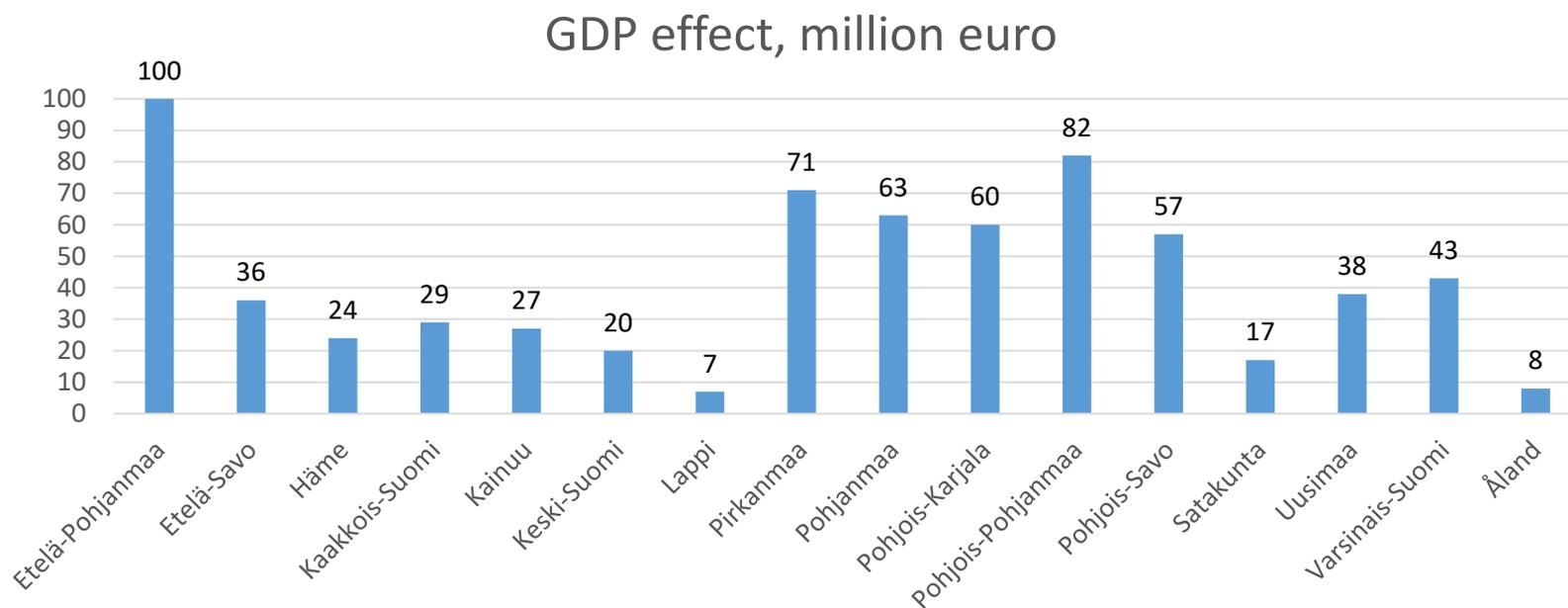
Regional economics effects of organic production in Finland

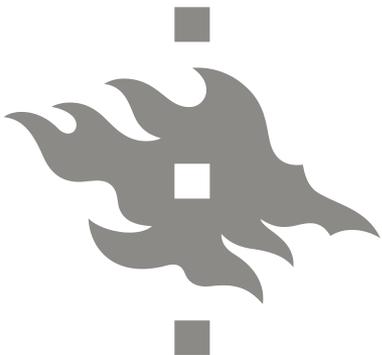
Finland in total	Employment, man-years	GDP, euro m.
Crop production	1 615	355
Meat production	738	132
Milk production	846	155
Horticultural production	211	51
<i>Organic production in total</i>	3 411	683





GDP effect of current organic production by region

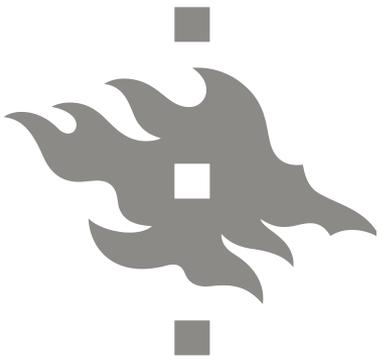




Economic effects of producers' own expectations and of the government's national goal

Producers' own expectations	Employment, %-age units	Employment, man years	GDP, %-age units	GDP, m. euro
The value of organic production grows 3 % between years 2014 and 2020	0.001	37	0.005	10

Government's goal	Employment, %-age units	Employment, man years	GDP, %-age units	GDP, m. euro
The share of organic farming grows to 20% of the cultivated land by 2020	0.01	205	0.03	64
The cultivated land of conventional farming decreases by the same amount of hectares by 2020	-0.03	-860	-0.07	-143
Combined effect	-0.03	-655	-0.04	-79



Summary and conclusions

- Economic reasons are the strongest motivators for converting to organic production, but also the environmental concerns contribute to the decision
- Bureaucracy and controls should be streamlined in order to reach even close to the government goalsetting of production growth
- Producers do not expect the production volume to increase at a pace needed to reach the national goal for organic production – new measures?
- In municipalities the common attitude towards organics is usually positive, but higher prices and low annual appropriations are hindering factors.
 - Promotion is needed
- The growth of organic farming is positive for the regions as such, but if it comes with a comparable decrease in conventional farming it entails an macro economic cost, but the change in societal wellbeing is unclear
 - Still, for a single farm the conversion to organic farming can be even a necessity in order to keep the farm profitable
- microeconomic rationalities >< macroeconomic efficiency

THANK YOU!

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